



May 3, 2024

Pro Surgical, Inc.
Jason Blain
Chief Executive Officer
3875 Copper Crest Rd.
Encinitas, California 92024

Re: K240126
Trade/Device Name: ProAM ALIF System
Regulation Number: 21 CFR 888.3080
Regulation Name: Intervertebral Body Fusion Device
Regulatory Class: Class II
Product Code: OVD
Dated: January 16, 2024
Received: April 1, 2024

Dear Mr. Blain:

We have reviewed your section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (the Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database available at <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm> identifies combination product submissions. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Additional information about changes that may require a new premarket notification are provided in the FDA guidance documents entitled "Deciding When to Submit a 510(k) for a Change to an Existing Device" (<https://www.fda.gov/media/99812/download>) and "Deciding When to Submit a 510(k) for a Software Change to an Existing Device" (<https://www.fda.gov/media/99785/download>).

Your device is also subject to, among other requirements, the Quality System (QS) regulation (21 CFR Part 820), which includes, but is not limited to, 21 CFR 820.30, Design controls; 21 CFR 820.90, Nonconforming product; and 21 CFR 820.100, Corrective and preventive action. Please note that regardless of whether a change requires premarket review, the QS regulation requires device manufacturers to review and approve changes to device design and production (21 CFR 820.30 and 21 CFR 820.70) and document changes and approvals in the device master record (21 CFR 820.181).

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR Part 803) for devices or postmarketing safety reporting (21 CFR Part 4, Subpart B) for combination products (see <https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products>); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR Part 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR Parts 1000-1050.

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance>) and CDRH Learn (<https://www.fda.gov/training-and-continuing-education/cdrh-learn>). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice>) for more information or contact DICE by email (DICE@fda.hhs.gov) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Brent Showalter -S

Brent Showalter, Ph.D.

Assistant Director

DHT6B: Division of Spinal Devices

OHT6: Office of Orthopedic Devices

Office of Product Evaluation and Quality

Center for Devices and Radiological Health

Enclosure

Indications for Use

Submission Number (if known)

K240126

Device Name

ProAM ALIF System

Indications for Use (Describe)

The ProAM ALIF System is an intervertebral body fusion device intended for spinal fusion procedures at one or two contiguous levels of the lumbosacral (L2-S1) spine in skeletally mature patients with degenerative disc disease (DDD), degenerative spondylolisthesis, and/or spinal stenosis. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and imaging studies (radiographs, CT, MRI). DDD patients may also have up to grade 1 spondylolisthesis or retrolisthesis at the involved levels. These patients may have had a previous non-fusion spinal surgery at the involved spinal level(s).

The ProAM ALIF System can be used as an adjunct to fusion in patients diagnosed with multilevel degenerative scoliosis and sagittal deformity. However, when used in these patients at multiple levels, and for patients with degenerative spondylolisthesis and spinal stenosis at one or two adjacent levels, the system must be used with supplemental spinal fixation systems cleared by the FDA for use in the lumbar spine in addition to the integrated fixation.

Interbody devices used with three screws and which have a lordotic angle of 20° or less can be used as standalone interbody fusion devices at one or two contiguous levels without the need for supplemental fixation.

Interbody devices with a lordotic angle greater than 20° must be used with supplemental spinal fixation systems cleared by the FDA for use in the lumbar spine in addition to the integrated fixation. Interbody devices used with fewer than three screws (OLIF devices and 2-Hole ALIF devices) must be used with supplemental spinal fixation systems cleared by the FDA for use in the lumbar spine in addition to the integrated fixation.

The ProAM ALIF System is intended for use on patients who have had at least six months of nonoperative treatment. It is intended to be used with autograft and/or allogenic bone graft comprised of cortical, cancellous, and/or corticocancellous bone, and/or demineralized allograft bone with bone marrow aspirate.

Type of Use (Select one or both, as applicable)

☒ Prescription Use (Part 21 CFR 801 Subpart D)

☐ Over-The-Counter Use (21 CFR 801 Subpart C)

CONTINUE ON A SEPARATE PAGE IF NEEDED.

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510(k) Number K240126

Date Prepared: April 1, 2024

Submitted By

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858-761-6262

Contact:

Jason Blain
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858-761-6262

Device Name

Device Trade Name: ProAM ALIF System
Common Name: Intervertebral Body Fusion Device
Classification Name: Intervertebral Fusion Device with Integrated Fixation, Lumbar
Device Class: Class II
Regulation Number: 12 CFR § 888.3080
Product Code: OVD

Predicate Devices*Primary Predicate Device*

NuVasive Modulus ALIF System – K230894

Additional Predicate Devices

Osseus Fusion Systems Pisces-SA Standalone ALIF Interbody System – K223413

Astura El Capital Anterior Lumbar Interbody Fusion – K222554

Spinal Elements Magnum+ – K083475

ATEC IdentiTi Interbody Systems – K232097

Device Description

The ProAM™ ALIF System is an intervertebral body fusion system that consists of an intervertebral body fusion device manufactured from titanium alloy (Ti-6Al-4V

conforming to ASTM F3001) and screws manufactured from titanium alloy (Ti-6Al-4V conforming to ASTM F136).

The intervertebral body fusion device has a cross-sectional shape that is somewhat oval, and the device is otherwise box-shaped in stature with cavities for containment of bone graft material. The device is available in sizes that vary in footprint size, height, and lordotic angle. It is available in configurations meant for direct anterior insertion (ALIF) or oblique-anterior (OLIF) insertion. Devices for implantation via a direct anterior approach are available with 2 or 3 holes through which screws are placed to affix to bone. Devices for implantation via an oblique-anterior approach have 2 holes through which screws are placed to affix to bone. All devices have an open, porous architecture throughout and a pyramidal textured porous surface at the endplate contacting surfaces that helps prevent device migration.

The fixation devices consist of screws that are available in various diameters and lengths. Screws engage the vertebral bodies by passing through the intervertebral body fusion device and into bone. They are turned to fixate to the bone.

Indications for Use

The ProAM ALIF System is an intervertebral body fusion device intended for spinal fusion procedures at one or two contiguous levels of the lumbosacral (L2-S1) spine in skeletally mature patients with degenerative disc disease (DDD), degenerative spondylolisthesis, and/or spinal stenosis. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and imaging studies (radiographs, CT, MRI). DDD patients may also have up to grade 1 spondylolisthesis or retrolisthesis at the involved levels. These patients may have had a previous non-fusion spinal surgery at the involved spinal level(s).

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Indications for Use Comparison

The Indications for Use of the ProAM ALIF System are identical to those for the listed predicate devices.

Technological Comparison

The ProAM ALIF System is substantially equivalent to the predicate devices when considering design, configurations and sizes, intended use, material composition, manufacture, function, and mechanical performance.

Performance Data

The following mechanical testing was performed:

Static and dynamic compression testing per ASTM F2077

Static and dynamic compression-shear testing per ASTM F2077

Subsidence testing per ASTM F2267

Expulsion

The mechanical testing demonstrated that the device performs as well or better than the predicates.

Conclusions

The ProAM ALIF System is substantially equivalent to the legally marketed predicate devices based on a comparison of indications for use, design, intended use, material composition, function, and mechanical performance.